

1. The 300 baud limit is an effective, albeit antiquated, method to limit bandwidth.

It must only be removed if it is replaced with a 200 HZ bandwidth limit in the lowest 50 kHz or so of each HF/MF band, and a 400 HZ or 500 HZ bandwidth limit in the next 50 kHz or so of each band. No WARC frequencies should allow wider data, in keeping with IARU recommendations. There are several generally accepted standards for a regulation of bandwidth emission, as found in all 3 published IARU standards, and in the governmental rules of dozens of countries who have regulations that mimic the IARU standards in their region, including Japan.

This regulated (not voluntary) narrowband emission approach is necessary to mitigate interference and to ensure the vast number of amateurs who use narrowband modes (e.g. CW, PSK31, RTTY, JT9, JT65) may continue their use and experimentation that is vital to the hobby.

This addresses one key question asked by the FCC in the NPRM --whether or not the 300 baud limit should be removed.

It should only be removed if it is replaced with a 200 Hz/ 500 Hz emission limit on each of the lower portions of each HF/ MF band. New, small "mid-band wide band data segments", having about 30-50 kHz total allocated bandwidth, should be provided having an emission bandwidth limit of 2.8 kHz (as suggested by ARRL).

This approach is precisely called for in all 3 IARU regions and is implemented in many governmental regulations, including Japan.

2. As a licensed amateur operator, I believe a fundamental tenet of the amateur radio hobby is that ham radio transmissions should be open and public so that other amateurs may intercept them easily, without requiring proprietary technology not open to hobbyists. Today's Winlink and Pactor 2 and 3 modems (and Pactor 4 which is requested by many commenters) have a proprietary, non-published compression algorithm owned by SCS, a German company. Other hams and even the FCC cannot intercept the traffic of these transmissions in ARQ mode in real world fading channels.

This is already a problem that threatens national security and makes it impossible to police today's small number of ACDS stations. The problem shall become drastically worse with much greater data payloads if either the FCC or ARRL proposal is implemented.

Before allowing wider band data or changing the rules on baud rate, the FCC should first solve the issue of disallowing proprietary compression today, before it allows faster data traffic such as Pactor 4 (which is 1800 baud). The FCC should clarify if it wishes for ham radio traffic to be open, using readily decipherable public communication methods.

By requiring a CW ID, a listen before talk protocol for ACDS stations, and by learning about the many violations that currently occur from out of band ACDS stations, lack of sys op monitoring, improper interpretation of control operation (which is allowing remote users to "take over" as control operator when illegally moving 2.2 kHz wide Pactor 3 transmissions out of the ACDS bands), the FCC should first clarify the part 97 rules regarding Internet oremail usage, and how all traffic can be made public, before allowing any expansion of data baud rate or bandwidth.

The current violations with the small number of Winlink/Pactor stations first must be cleaned up, and public/open compression and coding should be insisted upon in a rewrite of FCC rules to ensure that all hams can buy or build gear that allows full reception of all data transmissions. All messages and any internet browsing must be publicly available in real time and archived on public websites (should the FCC even deem internet browsing and email are appropriate uses of the hobby - this should be considered carefully by the Commission).

With clear rules and open transmissions befitting of the amateur radio hobby, wider band data could be allowed to flourish in new "mid band wideband data HF/MF segments" that start at about 100 kHz above the lowest edge of each non-WARC band, and end below the phone/image band. A 2.8 kHz BW limit should be imposed on this new mid band data segment, in following with the IARU standards and

Japan.